



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,926	01/20/2006	Massimo Gilioli	4017-39	4075
23117 7590 03/17/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
SUERETH, SARAH ELIZABETH				
ART UNIT		PAPER NUMBER		
3749				
MAIL DATE		DELIVERY MODE		
03/17/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/560,926

Applicant(s)

GILIOLI ET AL.

Examiner

Sarah Suereth

Art Unit

3749

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 60-62, 65-119 is/are pending in the application.
- 4a) Of the above claim(s) 65, 74-75, 79-80, 83-94, 96-111, 115-119 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 60-62, 66-73, 76-78, 81, 81.95, 112-114 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/15/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/15/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the embodiment disclosed in Figures 4-9 in the reply filed on 11/23/09 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 60-62,66-73,76-78,81,81,95,112-114 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The structure of the joining mechanisms between the diffuser faces is critical or essential to the practice of the invention, but is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Claim 60, lines 9-10 recite that the side faces are joined to the top face in such as way as to allow elastic rotation. However, there is no support for this limitation in the disclosure as originally filed. While Figure 7 appears to show some type of hinge connecting the faces, the structure or details of the hinge is not illustrated or discussed in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 60-62,66-73,76,95,112-114 are rejected under 35 U.S.C. 102(b) as being anticipated by Deckers (EP000774623) (cited on the IDS).

Deckers discloses a burner including a diffuser (Figure 1) with openings (8); the diffuser including a plurality of elements (7), each element having a top rectangular face (Figure 1) and side faces (11) connected in such a way to allow for elastic rotation (abstract, last three lines).

Regarding claim 61, the diffuser plates are made out of metal (col. 4, lines 2-6), which is regarded as providing great mechanical rigidity.

Regarding claims 61 and 62, Figure 4 shows the diffuser plates having a U shaped cross section.

Regarding claim 66, elements 6 and 10 form two front faces secured to the shorter sides of the rectangular faces (see Figure 4).

Regarding claims 68-73, flow distributing plate (16) includes openings (18), arranged inside of the diffuser (see Figure 3), with bump shaped spacers (21).

Regarding claim 76, rest elements (4) hold everything in place (Figure 3).

Regarding claim 95, the embodiment shown in Figure 5A includes slits (8).

Regarding claims 112-114, the diffuser elements are mostly flat (col. 5, lines 28-31). Figure 5E shows the elements arranged in a rectangular configuration with multiple plates arranged together.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 77,78,81,82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckers (EP000774623) (cited on the IDS) in view of Stoschek (EP0869315)(cited on PTO-892).

7. Deckers, as discussed above, discloses the invention as claimed with the exception of showing brackets to support all of the elements together (see Figure 3) instead of the claimed support rods.

8. Stoschek discloses a burner including burner elements (12) joined by a support rod (10).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Deckers apparatus by replacing the brackets on either side of the diffuser plate with support rods as taught by Stoschek, in order to allow cooling airflow to circulate through the rods to cool the plates (see abstract).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Suereth whose telephone number is (571) 272-9061. The examiner can normally be reached on Tuesdays & Thursdays 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Suereth/
Examiner, Art Unit 3749

/Steven B. McAllister/
Supervisory Patent Examiner, Art Unit 3749